

REMARKS

Applicant acknowledges receipt of the Final Rejection of 11 MAR. 2003 and requests reconsideration of the claims, as proposed to be amended.

CLAIM OBJECTION

As the Examiner correctly noted, dependent claim 6 cannot depend from cancelled claim 4. Claim 6 is therefore proposed to be amended to depend from claim 1, as the Examiner recommended. Following the Examiner's suggestion cannot be said to raise any "new issue," and no new search or lengthy consideration is needed.

CLAIM REJECTIONS

With respect to the rejections of claims 1-3, 5, 6, 8-12 and 15-18, please consider the following arguments:

WHAT DOHJO TEACHES

The Office has suggested that "Dohjo really appreciates the nature of the contact resistance problem by suggesting a high melting point metal for the extended scanning line and the extended auxiliary scanning line." First of all, Dohjo does not mention the term "contact resistance." Secondly, Dohjo col. 7, lines 35-37, state that the signal lines could be either Mo-W alloy, Mo-Ta alloy (both high-melting-point) or "Al or its alloy" (low-melting point). Thus, Dohjo does not teach that the melting point matters at all. Thirdly, it is not clear whether Dohjo's structure even has an "extended scanning line" or "auxiliary extended scanning line" since counsel has not found those exact terms in Dohjo, and the Office has not pointed out Dohjo terms which mean the same.

DOHJO'S ELEMENTS HAVE BEEN MISINTERPRETED

Page 3 of the Action calls Dohjo's element 125a an "extended scanning line" but Dohjo calls it an "upper layer wiring line section" and it does not function as an extended scanning line because specification page 7, lines 13-15, and page 15, lines 20-25, state that the function of the extended scanning line 14 is to connect the gate or scanning line with the terminal, while Dohjo col. 10, lines 44-53, state that the function of element 125a is to connect a "slant wiring line section 150" (FIG. 1, center area) with pads 152 (FIG. 1, lower left).

Page 3, line 16, alleges that Dohjo's "extended scanning line 125a is formed in a grid-like shape" when, in fact, Dohjo's 125a forms the slant wiring 150 (col. 10, lines 44-53; see FIGS. 1, 15, 28, representing respectively the 1st, 2nd & 3rd embodiments). It is not understood how slanting, non-parallel, connecting lines can be said to form a "grid-like shape" as recited in claims 17-18.

Page 4 of the Action calls Dohjo element 113 an "auxiliary capacitance line arranged in parallel to the scanning line" when in fact Dohjo (col. 7, line 55; col. 9, line 35) calls 113 a "strip-shaped elongate region" (FIG. 6) forming part of a scanning line 111. Note that FIG. 6 is a section along line E--E of FIG. 1. In FIG. 1, 113 looks parallel to signal lines 110, not parallel to the (horizontal) scan lines 111 which cross 110.

Page 4 of the Action calls element 125 an "extended auxiliary capacitance line" but Dohjo's 125 does not perform this function because 125 is (col. 13, line 36) is a sputtered Mo-W film layer which must be patterned before it can become "lines," and Dohjo later calls element 125 (see col. 23, line 62) a "bundling lead" which performs a different function. In view of these differences, withdrawal of the section 102 rejection of claims 1-3, 5, 8-12 & 15-18 is solicited.

THERE IS NO MOTIVATION TO COMBINE DOHJO WITH SAKATA

Paragraph 5 and page 6 of the Final Rejection contend that it would be obvious to use the etching process of SAKATA to improve the DOHJO high-aperture-ratio structure to obtain a good contact resistance, but starts from the faulty premise that DOHJO recognized the problem of contact resistance, which he did not. Conversely, starting from SAKATA, there is no unsolved problem discussed by the SAKATA Japanese publication of OCT. 1999 or the SAKATA USP of JUNE 26, 2001 which would motivate one to incorporate any features of the DOHJO structure. Only the benefit of having read the present disclosure would give one the idea of combining the DOHJO USP issued JUNE 20, 2000 with SAKATA (which, on the JUNE 19, 2000 Japanese priority date of the present application, was more than a year away from SAKATA's JUNE 26, 2001 US grant date). Since even the 18-month publication of Applicant's Japanese application 2000-183034 did not happen until about DEC. 2001, no one skilled in the art would have had any motivation to try to combine DOHJO with SAKATA, even as late as 7 JUN. 2001, when the present PCT/JP01/04824 was filed. Accordingly, at the time the present invention was made, there was no motivation to any person skilled in the art to combine DOHJO with SAKATA.

CONCLUSION

DOHJO does not suggest, much less anticipate, the structure recited in the present claims because DOHJO does not recognize the problem of contact resistance, and has numerous structural and functional differences from the present invention, as discussed above. The section 102 rejection of claims 1-3, 5-6, 8-12 and 15-18 should therefore be withdrawn.

It would not be obvious to combine DOHJO with SAKATA because DOHJO/TOSHIBA was aiming at maintaining manufacturing yield and high aperture ratio, while SAKATA was seeking to reduce the number of etching steps, and, even if such a combination were successfully made, it would not correspond to the present invention because, among other things, one would end up with another slant-wire

structure like DOHJO's. Claim 13 distinguishes over any possible combination of DOHJO with SAKATA. The section 103 rejection of claim 13 should therefore be withdrawn.

Claims 1-3, 5-6, 8-13 and 15-18 are clear, and patentably distinguish over DOHJO, SAKATA, and the other art of record, taken singly or in combination. Allowance of the claims is respectfully solicited.

Respectfully submitted,

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Att. Docket No. 542-007-2.

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JUN 04 2003

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